

February 16, 1994

CD-94-04(LDV)

Dear Manufacturer:

SUBJECT: Tampering Protection Requirements of the ON-Board
Diagnostics Rulemaking

Due to the potential for confusion over the applicability of 40 CFR 86.094-18 of the On-board Diagnostics (OBD) rulemaking, I am issuing this guidance letter to clarify the Agency's policy governing that section. The tampering prevention requirements of the OBD rulemaking are as follows:

40 CFR 86.094-18 Tampering Prevention

(a) Any vehicle with emission control computer instructions shall include features to deter modification except as authorized by the manufacturer. Any reprogrammable computer and the computer and any related maintenance instructions must conform to the provisions in SAE J2186... .

(b) Demonstration of compliance with the tampering protection section of the California OBD II requirements shall satisfy the requirements of this section through the 1998 model year.

Most of the industry is requesting waivers from the federal OBD requirements for the 1994 and 1995 model years. Those waivers are applicable to 86.094-17 which specifies the technological requirements of the OBD system (i.e., what emission control systems must be monitored and what emission levels are permissible prior to illumination of the malfunction indicator light (MIL)). Those vehicles and engine families receiving a waiver from compliance with 86.094-17 are still required to meet the less stringent OBD requirements promulgated by California in 1988 and referred to as OBD I.

The issue of concern is whether or not the anti-tampering provisions of 86-.094-18 apply to vehicles waived from complying with federal OBD and minimally complying with OBD I. In the proposed rulemaking, it was suggested that any waived vehicles comply with OBD I while incorporating any more advanced OBD technologies the manufacturer was capable of designing into the OBD I system. Manufacturers argued that such a requirement would result in costly design modifications to OBD I computers and systems, the use of which would be discontinued within 1 or 2 model

years in favor of the more advanced OBD computers and systems meeting federal OBD requirements.

In the final rulemaking, the Agency agreed with manufacturers that such redesigns and modifications to OBD I systems would be cost inefficient, and would hinder efforts toward full compliance with the federal OBD requirements. It was argued that any waiver vehicle would minimally be required to comply with OBD I only, rather than OBD I "plus. n Therefore, the final OBD rulemaking was never intended to require the manufacturers redesign existing OBD I computer systems to comply with federal OBD requirements.

During development of the OBD final rulemaking, EPA could identify no cases where easy, low burden changes to OBD I type systems could be implemented and result in significant improvements in the OBD I system's ability to detect malfunctioning or broken parts. Furthermore, the little leadtime available for manufacturers to implement enhancement to an OBD I system in the 1994 model year meant that such changes could not be made until the 1995 model year; thus providing benefits for only the 1995 model year, the last year before the more advanced OBD computers and systems meeting federal OBD would be required.

A similar issue has arisen previously. In that case, some manufacturers argued that they should not be required to comply with the bar code labelling requirements of 86.094-35 for those vehicles receiving a federal waiver. The Agency responded that waived vehicles must still comply, arguing that bar codes required no computer design changes, that sufficient leadtime existed to incorporate bar codes beginning with the 1994 model year, and that bar codes were desired for I/M purposes and should be incorporated into underhood labels as soon as possible.

The California OBD II regulations contain anti-tampering provisions essentially equivalent to 40 CFR 86.094-18, but California has no OBD specific anti-tampering provisions in the OBD I requirements. Consistent with the California policy, and because EPA did not intend to mandate changes to OBD I computers, vehicles waived from compliance with 40 CFR 86.094-17 and, therefore, minimally complying with OBD I requirements, need not incorporate the tampering protection features of 40 CFR 86.094-18.

If you have any questions regarding this policy, please contact Todd Sherwood (313) 668-4405 or Eldert Bontekoe (313) 668-4442 of my staff.

Sincerely,

Robert E. Maxwell, Director

Certification Division

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